

**REMARKS/ARGUMENTS**

Claims 1-5, 7-15, and 17-37 are pending and stand substantively rejected.  
Reconsideration of the claims is respectfully requested.

**Rejection Under 35 U.S.C. §§102/103**

Claims 1-5, 7-10, 13-15, 17-26 and 29-37 were rejected under 35 U.S.C. §102(b) as allegedly anticipated by or, in the alternative, under 35 U.S.C. §103(a) as allegedly obvious over U.S. Publication No. 2001/0041884 to Frey et al. [“Frey”] in view of U.S. Patent No. 6,738,511 to Farrell et al. [“Farrell”]. This rejection is traversed.

Applicants believe that the §102 rejection reflects a clerical error in the Office Action. At page 3, lines 15-16, the Office Action acknowledges that Frey does not disclose the step of adding a mean gradient field as presently claimed. If the §102 rejection is maintained, clarification is respectfully requested.

According to MPEP §2143, a *prima facie* case of obviousness requires, among other things, some suggestion or motivation, either in the references themselves or in the knowledge generally available to the artisan, to combine references. The proposed combination of Frey and Farrell does not meet this test.

Presently pending independent claims 1, 15, and 36 are drawn to methods for optical tissues that include compensating for tilt by adding a mean gradient field, for example. Similarly, presently pending independent claims 20, 29, and 33 are drawn to systems for optical tissues that include features for compensating for tilt by adding a mean gradient field, for example.

As noted above, Frey discusses a Fourier method, but fails to disclose adding a mean gradient field to remove a tilt from the reconstructed phase. Farrell describes a tilt elimination approach. However, Farrell involves interferometric techniques, wherein an object is illuminated with a light beam and reflected light from the surface of the object interferes with the illuminating beam to produce an interferogram. The result is a two-dimensional map of the surface profile of the object. Applicants note that Farrell is only concerned with attempts to characterize the surface profile or contour of the object.

Farrell appears largely (if not completely) irrelevant to the Frey reference. This is because Farrell's approach involves measuring the *profile* of relatively flat *surfaces*, as noted at col. 4, lines 42-43. In contrast, Frey involves the analysis of a light beam directed *through* the eye's optics, including the lens and cornea. Farrell does not discuss subsurface features, nor does Farrell discuss optical tissue evaluation. Thus, Farrell's surface analysis techniques are far removed from Frey's subsurface analysis of optical tissues.

Absent a showing to the contrary, Applicants respectfully submit that the artisan would not be motivated to use an interferometric profile analysis for relatively flat surfaces, as described by Farrell, in conjunction with subsurface analysis of optical tissues, as described by Frey.

As noted in MPEP §2142, the tendency to resort to hindsight reasoning is often difficult to avoid due to the nature of the examination process, but such reasoning must be avoided. Obviousness must be reached on the facts gleaned from the cited references alone, without the benefit of the Applicants disclosure. Applicants emphasize that to reach a proper determination under 35 U.S.C. §103, one must step backward in time and into the shoes worn by the hypothetical "person of ordinary skill in the art" when the invention was unknown and just before it was made. Knowledge of Applicants' disclosure must be put aside in reaching this determination. The legal conclusion of obviousness must be reached on the basis of facts gleaned from the cited references.

Presently pending independent claims 1, 15, 20, 29, 33, and 36 are allowable over the cited references for at least the reasons set forth above. Claims 2-5, 7-10, 13, 14, 17-19, 21, 26, 30-32, 34, 35, and 37 are also allowable as depending, either directly or indirectly, from the allowable base claims, as well as for the nonobvious combination of elements they recite. Withdrawal of this rejection is respectfully requested.

First Rejection Under 35 U.S.C. §103

Claims 11 and 12 were rejected under 35 U.S.C. §103(a) as allegedly obvious over Frey in view of Farrell, and further in view of Roddier et al., Applied Optics 30(11):1325-1327 (1991). This rejection is traversed.

Claims 11 and 12 depend from presently pending independent claim 1. As discussed above in 4, amended claim 1 is nonobvious because there is no motivation to combine Frey and Farrell. This deficiency is not remedied by Roddier. Thus, presently pending claims 11 and 12 are allowable as depending from an allowable base claim, as well as for the nonobvious combination of elements they recite. Withdrawal of this rejection is respectfully requested.

Second Rejection Under 35 U.S.C. §103

Claims 27 and 28 were rejected under 35 U.S.C. §103(a) as allegedly obvious over Frey in view of Farrell, and further in view of U.S. Patent No. 5,777,719 to Williams et al. (“Williams”). This rejection is traversed.

Claims 27 and 28 depend directly or indirectly from presently pending independent claim 20. As discussed above in 4, amended claim 1 is nonobvious because there is no motivation to combine Frey and Farrell. This deficiency is not remedied by Williams. Thus, presently pending claims 27 and 28 are allowable as depending from an allowable base claim, as well as for the nonobvious combination of elements they recite. Withdrawal of this rejection is respectfully requested.

**CONCLUSION**

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 303-571-4000.

Respectfully submitted,

/Nathan S. Cassell/

Nathan S. Cassell  
Reg. No. 42,396

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, Eighth Floor  
San Francisco, California 94111-3834  
Tel: 303-571-4000  
Fax: 415-576-0300  
60842273 v1